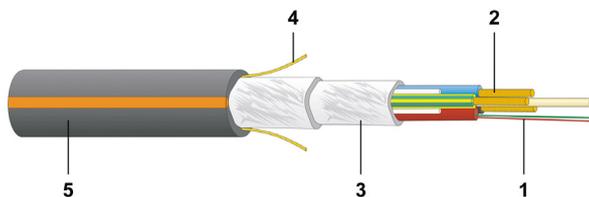


# FO Universal wbGGFR Combi / U-DQS(ZN)BH

Combination cable with 3 stranded copper wires

dry interstices, rodent protection,  
in accordance with IEC 60332.1 and IEC 60332.3 .C



- 1 Fibres
- 2 Copper wires
- 3 Glass armour
- 4 Ripcord
- 5 FR/LSOH sheath



## Description

The glass armour provides for a combined non-metallic rodent protection and strain relief.  
Two ripcords enable the safe opening of the cable sheath.  
Dry stranding interstices - easy handling.  
Flame retardant, flame resistant cable sheath.

## Application

For indoor and outdoor use.  
Camera combi cable in tunnels, underground railroads, large-scale industry.  
Pulling in or blowing through thermoplastic ducts.  
Laying on cable platforms and cable trays.

## Construction

Outer sheath material	FRNC/LSZH
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## General properties

Maximum number of fibres	2
Installation temperature	-10 °C - +50 °C
Storage temperature	-25 °C - +70 °C
Operating temperature	-25 °C - +70 °C
Imprint	DATWYLER «cable type» «Datwyler designation» «DIN designation» «no. of fibres» «fibre type» «add. text» «batch no.» «meter marks»
Field of application	Universal

## Standards

Tensile performance	IEC 60794-1-21 E1
Crush resistance	IEC 60794-1-21 E3
Impact	IEC 60794-1-21 E4
Repeated bending	IEC 60794-1-21 E6
Torsion	IEC 60794-1-21 E7
Bend	IEC 60794-1-21 E11
Temperature cycling	IEC 60794-1-22 F1
Reaction to fire	EN 13501-6
Euroclass	D <sub>ca</sub>
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
Flame spread	IEC 60332-3-24, EN 60332-3-24, VDE 0482-332-3-24

## Versions

Material number	Product	Reaction to fire	Outer sheath colour	Fibre type	Fibre category	Outer sheath diameter [mm]	Bending radius [mm]	Weight [kg/km]	Tensile load [N]	Crush resistance short term [N]	Crush resistance continuous [N]	Fire load [kWh/m]	Packing unit	GTIN / EAN
18635800DZ	FO Universal wbGGFR Combi 1x2	Dca-s2,d1,a1	black	E9/125 G.652.D OS2	OS2	13.0	200	242	3,000	3,000	1,000	0.774	by the metre	

Subject to technical modification

As of 2024-06-27 11:36:21